MEMORANDUM

INTERMOUNTAIN POWER SERVICE CORPORATION

TO: George Cross

FROM: Dennis K. Killian

DATE: February 5, 2002

SUBJECT: HP Turbine Performance Testing PR#

Please approve the attached Purchase Requisition for conducting acceptance testing on the high pressure (HP) turbine following the IGS Unit 2 Major Outage. We are planning to use a third party contractor and utilized the ASME PTC 6.1 Alternative Test Procedure of Steam Turbines. This method is a simplified version of the full test and uses the primary HP feedwater flow element. Estimated cost of the performance testing is $60,000.

The objective of the acceptance testing is to determine the HP turbine efficiency (enthalpy drop test) and HP Wheel Power (electrical load produced by the HP turbine). This information is required to determine HP turbine contract penalties and incentives.

In addition to benchmarking the HP turbine for acceptance, the performance tests will also be used for benchmarking the performance of other key turbine cycle components. These include: the IP turbine (following its outage overhaul), retractable steam packing on HP & IP turbine, boiler feedpump volute acceptance (following outage changeout), boiler feedpump turbines, feedwater heaters, and condenser.

Third party acceptance testing with high accuracy instrumentation at key locations also allows us to reconcile results with station instrumentation. All instrumentation points will be cross checked and reconciled. Station instrumentation that is out of tolerance will be re-calibrated and/ or changed out. High accuracy instrumentation is also critical for several other key relationships; 1st stage pressure to throttle steam flow for tubrine controls setup, final feedwater flow to throttle flow (for controls as well as monitoring steam flow for safety constraints, plus generator electrical output.

If there are any questions, please contact Jerry Hintze at ext 6460 or Aaron Nissen at ext 6482.

AEN:
attachments